

**METHOD AND APPARATUS FOR INTENTIONAL IMPAIRMENT OF  
GASTRIC MOTILITY AND/OR EFFICIENCY BY TRIGGERED ELECTRICAL  
STIMULATION OF THE GASTROINTESTINAL TRACT WITH RESPECT  
TO THE INTRINSIC GASTRIC ELECTRICAL ACTIVITY**

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**ABSTRACT**

A sensor based gastric stimulator system and method for gastric stimulation of a patient employing an implantable gastric stimulator, which includes an information processor, an electrical stimulator circuit, and telemetry circuitry. The implantable stimulator senses intrinsic, gastric electrical activity (slow waves and/or peristaltic waves) and delivers electrical stimulation to intentionally disrupt or disorganize that activity. The stimulation is triggered by (tracks) normal gastric electrical activity and can be delivered with a spatial offset to anticipate the propagating gastric electrical activity or may be delayed temporally to anticipate the next propagating slow or peristaltic wave. The stimulator may be programmed to disrupt/disorganize all or a percentage of the intrinsic, normal gastric electrical activity. The programmer (via radio frequency data link) may non-invasively program stimulation parameters and intervals. The stimulator may provide stimulation to one or a plurality of stimulation sites and may incorporate one or a plurality of independently programmable sensing and/or stimulation channels. The information processor of the implantable gastric stimulator uses the gastric stimulation information from the non-electrode sensor for determining periods or windows of susceptibility for application of the electrical signals conveyed with the stimulation electrode for conveying electrical signals from the electrical stimulator circuit to the stomach wall of the patient.

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